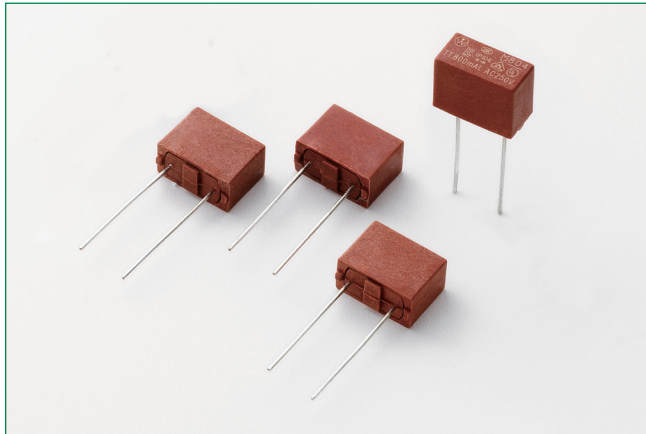


804 Series

Time-Lag Fuse



Description

The 804 Series is a TE Universal Modular Fuse (UMF), TT time-lag type subminiature fuse designed for overcurrent protection. It is 250V rated and designed in accordance to IEC 60127-4.

Features & Benefits

- Lead-free, Halogen-free and RoHS compliant.
- Reduced PCB space requirements
- Direct solderable or plug-in versions
- Low internal resistance
- Shock safe casing
- Vibration resistant
- Excellent surge tolerance due to high i2t values
- Listed to IEC 60127-1 and IEC 60127-4
- Approved to EN 60127-1 and EN 60127-7
- Approved to GB 9364.1 and GB 9364.4
- Approved to J60127-1 and J60127-4
- Approved to K60127-1 and K60127-4

Additional Information



Resources



Accessories



Samples

Electrical Characteristics

| % of Ampere Rating | Opening Time |
|--------------------|---|
| 125% | 3600 sec Minimum |
| 200% | 120 sec Maximum |
| 1000% | 100 milliseconds Minimum 1 sec Maximum |

Applications

- Battery Charger
- Consumer Electronics
- Power Supplies
- Industrial Controllers

Agency Approvals

| Agency | Agency File Number | Ampere Range |
|--------|--------------------|--------------|
| UL M | E242325 | 0.8A – 6.3A |
| D'E | 40029388 | 0.8A – 6.3A |
| CEC | CQC10012048703 | 0.8A - 6.3A |
| PS E | NBK180518-JP1021A | 1A – 2.5A |
| | NBK180518-JP1021B | 3.15A – 5A |
| | NBK180518-JP1021C | 6.3A |
| CE | SU05024-10005 | 0.8A |
| | SU05024-10004 | 1A - 2.5A |
| | SU05024-10006 | 3.15A - 6.3A |
| UK CA | NA | 0.8A – 6.3A |
| CE | NA | 0.8A – 6.3A |

Electrical Characteristics

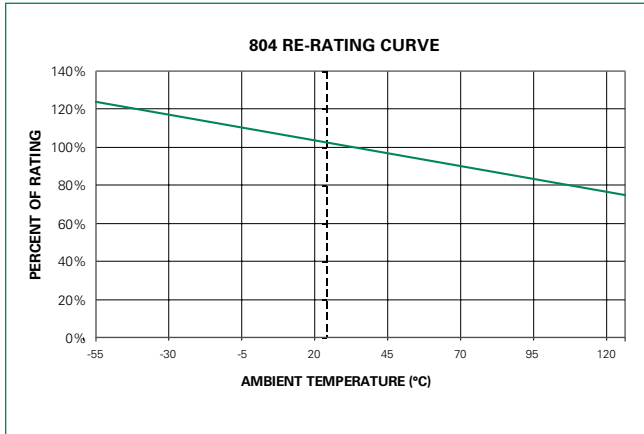
| Amp Code | Ampere Rating | Rated Voltage | Interrupting Rating | Nominal Cold Resistance (Ohms) | Voltage Drop 1.0xI _N max [mV] | Power Dissipation 1.25xI _N max [mW] | Melting Integral 10xI _N max [A ² s] | Agency Approvals | | | | | | |
|----------|---------------|---------------|---------------------|--------------------------------|--|--|---|------------------|-------|----|---|-----|-----|------|
| | | | | | | | | CE | UK CA | CE | M | D'E | CEC | PS E |
| 0800 | 0.80A | 250V | 150A @250VAC | 0.1887 | 218 | 332 | 12.480 | x | x | x | x | x | x | - |
| 1100 | 1.00A | 250V | | 0.1166 | 171 | 324 | 20.000 | x | x | x | x | x | x | x |
| 1125 | 1.25A | 250V | | 0.0816 | 151 | 352 | 30.00 | x | x | x | x | x | x | x |
| 1160 | 1.60A | 250V | | 0.0569 | 135 | 464 | 51.00 | x | x | x | x | x | x | x |
| 1200 | 2.00A | 250V | | 0.0458 | 183 | 486 | 88.00 | x | x | x | x | x | x | x |
| 1250 | 2.50A | 250V | | 0.0349 | 118 | 675 | 137.50 | x | x | x | x | x | x | x |
| 1315 | 3.15A | 250V | | 0.0228 | 163 | 818 | 212.94 | x | x | x | x | x | x | x |
| 1400 | 4.00A | 250V | | 0.0174 | 128 | 945 | 368.00 | x | x | x | x | x | x | x |
| 1500 | 5.00A | 250V | | 0.0138 | 98 | 1091 | 748.00 | x | x | x | x | x | x | x |
| 1630 | 6.30A | 250V | | 0.0100 | 78 | 1125 | 1099.00 | x | x | x | x | x | x | x |

Note:
1. Resistance is measured at 10% of rated current, 25°C.

804 Series

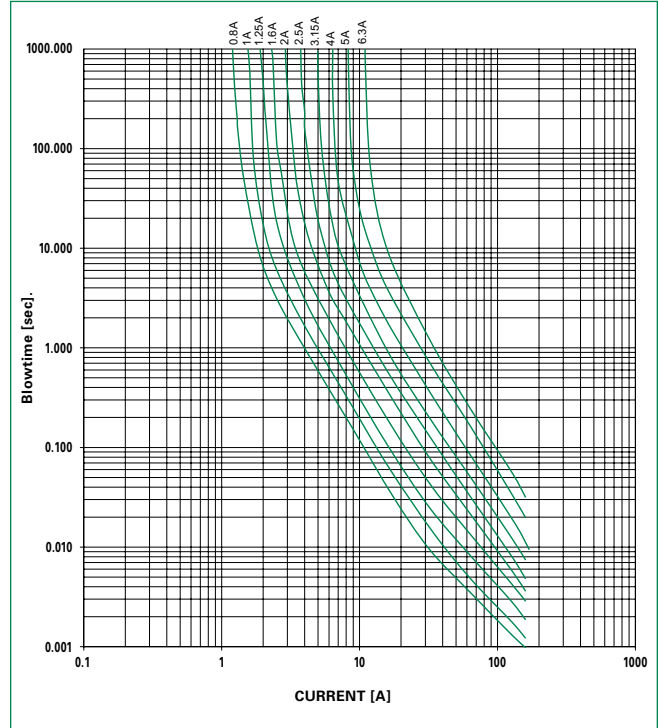
Time-Lag Fuse

Temperature Re-rating Curve

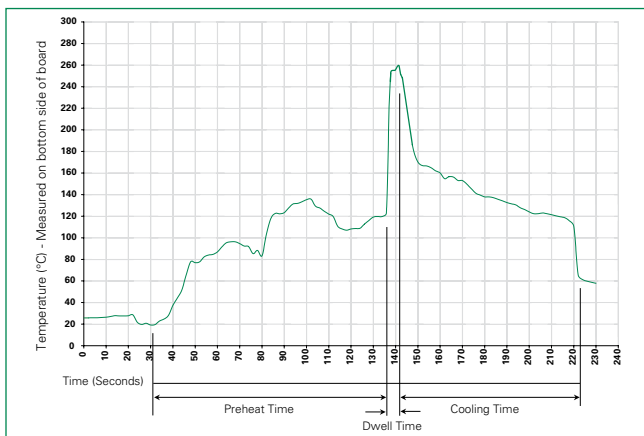


Note:
 1. Derating depicted in this curve is in addition to the standard derating of 25% for continuous operation.

Average Time Current Curves



Soldering Parameters - Wave Soldering



Recommended Process Parameters:

| Wave Parameter | Lead-Free Recommendation |
|--|-----------------------------------|
| Preheat: (Depends on Flux Activation Temperature) | (Typical Industry Recommendation) |
| Temperature Minimum: | 100°C |
| Temperature Maximum: | 150°C |
| Preheat Time: | 60-180 seconds |
| Solder Pot Temperature: | 260°C Maximum |
| Solder Dwell Time: | 2-5 seconds |

Recommended Hand-Solder Parameters:

Solder Iron Temperature: 350°C +/- 5°C
 Heating Time: 5 seconds max.

Note: These devices are not recommended for IR or Convection Reflow process.

804 Series

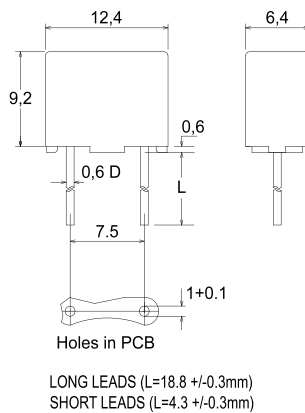
Time-Lag Fuse

Product Characteristics

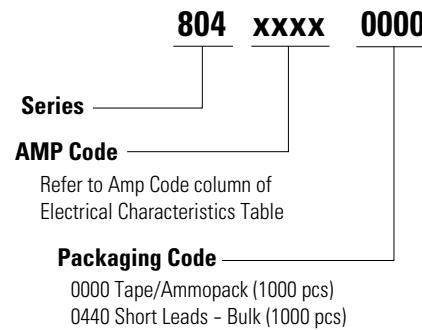
| | |
|----------------------------------|--|
| Materials | Base/Cap: Brown Thermoplastic Polyamide, UL 94V-0 Round Pins: Copper, Sn Plated |
| Lead Pull Strength | 10 N (IEC 60068-2-21) |
| Solderability | 260°C, ≤ 3s. (Wave) 350°C, ≤ 1s. (Soldering Iron) |
| Soldering Heat Resistance | 260°C, 10s. (IEC 60068-2-20) 350°C, 3s. (Soldering Iron) |

| | |
|------------------------------|---|
| Operating Temperature | -40°C to +125°C (Consider re-rating) |
| Climatic Category | -40°C/+85°C/21 days (IEC 60068-1, -2-1, -2-2, -2-78) |
| Stock Conditions | +10°C to +60°C relative humidity 75% yearly average, without dew, maximum value for 30 days – 95% |
| Vibration Resistance | 24 cycles at 15 min. each (IEC 60068-2-6) 10 – 60Hz at 0.75mm amplitude 20 – 2000Hz at 10g acceleration |

Dimensions (mm)



Part Numbering System



Packaging

| Packaging Option | Packaging Specification | Quantity | Quantity & Packaging Code | Reel Size |
|------------------|-------------------------|----------|---------------------------|-----------|
| Tape & Ammopack | N/A | 1,000 | 0000 | N/A |
| Short Leads | N/A | 1,000 | 0440 | N/A |

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